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RAW SEQUENCE LISTING

3 <110: APPLICANT: Barak, Larry S.

PATENT APPLICATION: US/10/054,616A

DATE: 10/31/2002 TIME: 17:06:19

Input Set . A:\033072-022.ST25.txt

```
Oakley, Robert H.
 4
 5
        Caron, Marc G.
        Laporte, Stephane A.
        Wilbanks, Alyson
9 <120: TITLE OF INVENTION: Constitutively Desensitized G Protein-Coupled Receptors
11 <130> FILE REFERENCE: 033072-022
14 + 140: CUERENT APPLICATION NUMBER: US 10/054,616A
14 <141: CUERENT FILING DATE: 2002-01-22
16 - 150: PRIOR APPLICATION NUMBER: US 60/263,406
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25 < 212: TYPE: PRT
26 < 213 : OECANISM: Homo sapiens
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33 Asp Fro Leu Leu Ala Arg Ala Glu Leu Ala Leu Leu Ser Ile Val Phe
34 35
                               4.0
35 Val Ala Val Ala Leu Ser Ash Gly Leu Val Leu Ala Ala Leu Ala Arg
                           55
37 Arg Gly Arg Arg Gly His Trp Ala Pro Ile His Val Phe Ile Gly His
                                           75
39 Leu Cys Leu Ala Asp Leu Ala Val Ala Leu Phe Gln Val Leu Pro Gln
                  85
                                       91)
41 Leu Ala Trp Lys Ala Thr Asp Arg Phe Arg Gly Pro Asp Ala Leu Cys
                                   105
              100
43 Ard Ala Val Lys Tyr Len Glr. Met Val Gly Met Tyr Ala Ser Ser Tyr
                              120
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45 Met Ile Leu Ala Met Thr Leu Asp His His Arg Ala Ile Cys Arg Pro
                          135
                                               140
47 Met Len Ala Tyr Ard His Gly Ser Gly Ala His Trp Asn Ard Pro Val
                      150
                                          155
49 Leu Val Ala Trp Ala Phe Ser Leu Leu Leu Ser Leu Pro Gln Leu Phe
                                      170
                  165
fl lle Phe Ala Gln Arg Asn Val Glu Gly Gly Ser Gly Val Thr Asp Cys
                                   185
f3 Trp Ala Cys Phe Ala Glu Pro Trp Gly Arg Arg Thr Tyr Val Thr Trp
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DATE: 10/31/2002 11ME: 17:06:19

PATENT APPLICATION: US/10/054,616A

Input Set : A:\033072-022.ST25.txt

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46		210					215					220				
47	Gln	Val	Leu	I 1->	Phe	Arq	Glu	He	His	Ala	ser	Leu	Val	Pro	Gly	Pro
7.8	225					230					235					240
1,0	Ser	Glu	Arg	Pro	Gly	$G1_T^{\omega}$	Arg	Arg	Arq	Gly	Arg	Arg	Thr	Gly	Ser	Pro
٠.()					245					250					255	
r. 1	Gly	Glu	$Gl_{\mathcal{I}}$	A La	His	Val	ser	Ala	Ala	Val	Ala	Lys	Thr	Val	Arq	Met
ь2				260					265					27()		
3	Tlir	i.eu	Val	ile	Val	vai	vai	1yr	va i	Leu	Cys	Trp	Ala	Pro	Phe	Phe
+ 4			275					280					285			
	Leu	Val	Gln	Leu	Trp	Ala		Trp	Asr	Pro	Glu	Ala	Pro	Leu	Glu	Gly
• 6		-90					295					300				
t, 7	Ala	Pro	Phe	Val	Leu		Met	rear	Leu	Ala		Leu	Asn	Ser	Cys	
+ 3	305					310					315				_ ,	320
	Asn	Pro	Trp	Ile	-	Ala	Ser	Phe	Ser		Ser	Val	Ser	Ser		Leu
.,1					325					33()			_		335	
	Arq	Ser	Leu		Cys	Cys	Ala	Arq		Arg	Thr	Pro	Pro		Leu	GIY
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	Pro	GIn	_	GH.	Ser	Cys	Thr		Ala	Ser	ser	ser		Ala	l.∵S	Asp
14	- 1		355					360					365			
	Thr		ser													
	-210		ovo tr	n Mari	,											
	-211				_											
	- 2112				1.0											
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	<213 <400					den h	namst	er								
⊀ .4	<400): SI	EQUEI	VCE:	2				His	Asn	Thr	Ser	Ala	Pro	Ala	Gln
⊀ .4	<400): SI	EQUEI	VCE:	2				His		Thr	Ser	Ala	Pro	Ala	Gln
ਲ4 ਕਵੇਂ ਵ	<400 Met :)> SI Asn	EQUEI Pro	NCE: Asp	2 Leu I	Asp	Thr	Glÿ		1 U					C.L	
ਲ4 ਕਵੇਂ ਵ	<400 Met :)> SI Asn	EQUEI Pro	NCE: Asp	2 Leu I	Asp	Thr	Glÿ		1 U		Ser Pro			C.L	
. 84 	<pre><400 Met : Irp</pre>): SI Asn Gly	EQUEN Pro Glu	NCE: Asp Leu 20	2 Leu I Lys	Asp Asp	Thir Ala	Gly Asn	Ph€ 25	Thr	Gly		Asn	Gln 30	15 Thr	ser
. 84 	<pre><400 Met : Irp</pre>): SI Asn Gly	EQUEN Pro Glu	NCE: Asp Leu 20	2 Leu I Lys	Asp Asp	Thir Ala	Gly Asn	Ph€ 25	Thr	Gly	Pro	Asn	Gln 30	15 Thr	ser
84 85 85 88 89	<pre>.400 Met : Irp Ser</pre>	Asn Gly Asn	EQUEN Pro Glu Ser 35	NCE: Asp Leu 20 Thr	2 Leu Lys Leu	Asp Asp Pro	Thr Ala Gln	Glÿ Asn Leu 40	Ph⊕ 25 Asp	Thr Val	Gly Thr	Pro	Asn Ala 45	Gln 30 Ile	Thr Ser	Ser Val
84 85 85 88 89 90 91 92	400 Met 1 Irp Ser Gly	Or SE Asn Gly Asn Leu 50	EQUEN Pro Glu Ser 35 Val	Asp Leu 20 Thr	2 Leu I Lys Leu Gly	Asp Asp Pro Ala	Thir Ala Gln Phe 55	Gly Asn Leu 40 Ile	Ph⊕ 25 Asp Leu	Thr Val	Gly Thr Ala	Pro Arg 11e 60	Asn Ala 45 Val	Gln 30 Ile Gly	Thr Ser Asn	Ser Val Ile
84 85 85 88 89 90 91 92	400 Met 1 Irp Ser Gly	Or SE Asn Gly Asn Leu 50	EQUEN Pro Glu Ser 35 Val	Asp Leu 20 Thr	2 Leu I Lys Leu Gly	Asp Asp Pro Ala	Thir Ala Gln Phe 55	Gly Asn Leu 40 Ile	Ph⊕ 25 Asp Leu	Thr Val	Gly Thr Ala	Pro Arg	Asn Ala 45 Val	Gln 30 Ile Gly	Thr Ser Asn	Ser Val Ile
84 95 86 89 91 94	Ser Gly Leu	Asn Gly Asn Leu 50 Val	EQUEN Pro Glu Ser 35 Val	CE: Asp Leu 20 Thr Leu Leu	Leu Lys Leu Gly Ser	Asp Asp Pro Ala Val 70	Thir Ala Gln Phe 55 Ala	Gly Asn Leu 40 Ile Cys	Phe 25 Asp Leu	Thr Val Phe	Gly Thr Ala His 75	Pro Arg 11e 60 Leu	Asn Ala 45 Val	Gln 30 Ile Gly	Thr Ser Asn Pro	Ser Val Ile Thr 80
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#4 #5 #6 #9 90 91 94 96	400 Met 1 Irp Ser Gly Leu 55 Asn	Asn Gly Asn Leu 50 Val	EQUENT Pro Glu Ser 35 Val Ile	Asp Leu 20 Thr Leu Leu	Leu Lys Leu Gly Ser Val 85	Asp Pro Ala Val 70 Asn	Thir Ala Gln Phe 55 Ala Leu	Gly Asn Leu 40 Ile Cys Ala	Phe 25 Asp Leu Asn	Thr Val Phe Arq Ala 90	Gly Thr Ala His 75 Asp	Pro Arg 11e 60 Leu	Asn Ala 45 Val Arg	Gln 30 Ile Gly Thr	Thr Ser Asn Pro Ser 95	Ser Val Ile Thr 80 Phe
84 85 86 89 94 93 94 96 97	400 Met 1 Irp Ser Gly Leu 55 Asn	Asn Gly Asn Leu 50 Val	EQUENT Pro Glu Ser 35 Val Ile	Asp Leu 20 Thr Leu Leu Leu Pro	Leu Lys Leu Gly Ser Val 85	Asp Pro Ala Val 70 Asn	Thir Ala Gln Phe 55 Ala Leu	Gly Asn Leu 40 Ile Cys Ala	Phe 25 Asp Leu Asn Ile	Thr Val Phe Arq Ala 90	Gly Thr Ala His 75 Asp	Pro Arg 11e 60 Leu	Asn Ala 45 Val Arg	Gln 30 Ile Gly Thr Leu	Thr Ser Asn Pro Ser 95	Ser Val Ile Thr 80 Phe
84 85 85 89 94 94 96 98	Ser Gly Leu 55 Asn	Asn Gly Asn Leu 50 Val Tyr	EQUENT Pro- Glu Ser 35 Val Ile Phe Leu	Asp Leu 20 Thr Leu Leu 11e Pro 100	Leu Lys Leu Gly Ser Val 85 Phe	Asp Pro Ala Val 70 Asn Ser	Thir Ala Gln Phe 55 Ala Leu Ala	Gly Asn Leu 40 Ile Cys Ala Thr	Phe 25 Asp Leu Asn 11e Leu 105	Thr Val Phe Arg Ala 90 Glu	Gly Thr Ala His 75 Asp Val	Pro Arg 11c 60 Leu Leu	Asn Ala 45 Val Arg Leu Gly	Gln 30 11e Gly Thr Leu Tyr 110	Thr Ser Asn Pro Ser 95 Trp	Ser Val Ile Thr 80 Phe Val
84 85 86 89 90 91 93 94 96 98 99	Ser Gly Leu 55 Asn Thr	Asn Gly Asn Leu 50 Val Tyr	EQUENT Pro Glu Ser 35 Val He Phe Leu Arq	Asp Leu 20 Thr Leu Leu 11e Pro 100 11e	Leu Lys Leu Gly Ser Val 85 Phe	Asp Pro Ala Val 70 Asn Ser	Thir Ala Gln Phe 55 Ala Leu Ala	Gly Asn Leu 40 Ile Cys Ala Thr	Phe 25 Asp Leu Asn 11e Leu 105 Trp	Thr Val Phe Arg Ala 90 Glu	Gly Thr Ala His 75 Asp Val	Pro Arg 11e 60 Leu	Asn Ala 45 Val Arg Leu Gly Asp	Gln 30 Ile Gly Thr Leu Tyr 110 Val	Thr Ser Asn Pro Ser 95 Trp	Ser Val Ile Thr 80 Phe Val
84 85 85 89 90 91 92 98 99 100	Ser Gly Lou 55 Asn Thr	Asn Gly Asn Leu 50 Val Tyr Val Gly	EQUER Pro Glu Ser 35 Val Ile Phe Leu Arq	Asp Leu 20 Thr Leu Leu 11e Pro 100 11e	Leu Lys Leu Gly Ser Val 85 Phe	Asp Pro Ala Val 70 Asn Ser	Thir Ala Gln Phe 55 Ala Leu Ala Asp	Gly Asn Leu 40 Ile Cys Ala Thr Ile 120	Phe 25 Asp Leu Asn 11e Leu 105 Trp	Thr Val Phe Arq Ala 90 Glu Ala	Gly Thr Ala His 75 Asp Val	Pro Arg 11c 60 Leu Leu Val	Asn Ala 45 Val Arg Leu Gly Asp 125	Gln 30 11e Gly Thr Leu Tyr 110 Val	Thr Ser Asn Pro Ser 95 Trp Leu	Ser Val Ile Thr 80 Phe Val Cys
84 85 89 90 91 93 94 95 96 100 101	Ser Gly Leu 55 Asn Thr Leu Cys	Asn Gly Asn Leu 50 Val Tyr Val Gly	EQUENT Pro- Glu Ser 35 Val He Phe Leu Arq 115	Asp Leu 20 Thr Leu Leu 11e Pro 100 11e	Leu Lys Leu Gly Ser Val 85 Phe	Asp Pro Ala Val 70 Asn Ser	Thr Ala Gln Phe 55 Ala Leu Ala Asp	Gly Asn Leu 40 Ile Cys Ala Thr Ile 120 Theu	Phe 25 Asp Leu Asn 11e Leu 105 Trp	Thr Val Phe Arq Ala 90 Glu Ala	Gly Thr Ala His 75 Asp Val	Pro Arg He 60 Leu Leu Leu Val	Asn Ala 45 Val Arg Leu Gly Asp 125	Gln 30 11e Gly Thr Leu Tyr 110 Val	Thr Ser Asn Pro Ser 95 Trp Leu	Ser Val Ile Thr 80 Phe Val
84 85 89 90 91 93 94 95 96 100 101	Ser Gly Leu 55 Asn Thr Leu Cys	Asn Gly Asn Leu 50 Val Tyr Val Gly 5 Thr 130	EQUER Pro Glu Ser 35 Val Ile Phe Leu Arg 115	Leu Leu Leu Leu Leu Ile Pro 100 Ile 5	Leu Cly Ser Val 85 Phe Phe	Asp Pro Ala Val 70 Asn Ser Cys	Thr Ala Gln Phe 55 Ala Leu Ala Asp	Gly Asn Leu 40 Ile Cys Ala Thr Ile 120 Theu	Phe 25 Asp Leu Asn Ile Leu 105 Trp	Thr Val Phe Arq Ala 90 Glu Ala	Gly Thr Ala His 75 Asp Val Ala	Pro Arg He 60 Leu Leu Leu Val Ser 140	Asn Ala 45 Val Arg Leu Gly Asp 125 Tile	Gln 30 11e Gly Thr Leu Tyr 110 Val 5 Asp	Thr Ser Asn Pro Ser 95 Trp Leu	Val Thr 80 Phe Val Cys
84 85 89 90 91 92 93 94 96 96 97 100 101	Ser Gly Leu 55 Asn Thr Leu Cys	Asn Gly Asn Leu 50 Val Tyr Val Gly S Thr 130 C Gly	EQUER Pro Glu Ser 35 Val Ile Phe Leu Arg 115	Leu Leu Leu Leu Leu Ile Pro 100 Ile 5	Leu Cly Ser Val 85 Phe Phe	Asp Pro Ala Val 70 Asn Ser Cys	Thr Ala Gln Phe 55 Ala Leu Ala Asp 1 Ser 135	Gly Asn Leu 40 Ile Cys Ala Thr Ile 120 Theu	Phe 25 Asp Leu Asn Ile Leu 105 Trp	Thr Val Phe Arq Ala 90 Glu Ala	Gly Thr Ala His 75 Asp Val Ala a Ile	Pro Arg He 60 Leu Leu Leu Val Val P Ser 140 T Leu	Asn Ala 45 Val Arg Leu Gly Asp 125 Tile	Gln 30 11e Gly Thr Leu Tyr 110 Val 5 Asp	Thr Ser Asn Pro Ser 95 Trp Leu	Ser Val Ile Thr 80 Phe Val Cys Lyr g Arg
84 85 89 90 91 92 93 94 96 96 100 101 103	Ser Gly Leu 55 Asn Thr Leu Cys 3 Ileu 145	Asn Gly Asn Leu 50 Val Tyr Val Gly 6 Thr 130 6 Gly	EQUER Pro Glu Ser 35 Val Ile Phe Leu Arq 115 c Ala	Leu Leu Leu Leu Leu Ile Pro 100 Ile Sei	Leu I Lys Leu Gly Ser Val 85 Phe Phe Ile	Asp Pro Ala Val 70 Asn Ser Cys	Thr Ala Gln Phe 55 Ala Leu Ala Asp 1 Ser 135	Gly Asn Leu 40 Ile Cys Ala Thr Ile 120 Leu G	Phe 25 Asp Leu Asn He 105 Trp Cys	Thr Val Phe Arq Ala 90 Glu Ala	Gly Thr Ala His 75 Asp Val Ala Ile Thr 155	Pro Arg He 60 Leu Leu Leu 1eu 1eu 1eu 1.00 1.00 1.00 1.00 1.00	Asn Ala 45 Val Arg Leu Gly Asp 125 L16 Control	Gln 30 Ile Gly Thr Leu Tyr 110 Val 5 Asp	Thr Ser Asn Pro Ser 95 Trp Leu O Glu	Val Thr 80 Phe Val Cys

PATENT APPLICATION: US/10/054,616A I

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108			•	130			·		185					190		
109	Lvs	Glu	Cys	Gly	Va l	Thr	Glu	Glu	Pro	Phe	fyr	Ala	Leu	b } ii	ser	3er
11.	•		195	•				200					205			
	Leu	Gly	Ser	Phe	Tyr	$I l \approx$	Pro	Leu	Ala	Val	11e	Leu	Val	Met.	Tyr	Cys
112		210					215					220				
	Ara		rvr	110	Val	Ala	Lys	Arq	Thr	Thr	LVS	Asn	Leu	Glu	Ala	Gly
	225		- 1 -			230	- 4				235					240
		иет	LVS	Giu	Met.		Asr.	ser	LYS	Giu		lhr	Leu	Arq	11e	His
116			212		245				•	250					255	
	Ser	Tys	Asri	թեր		G1::	Asr	Thr	Leu		Ser	Thr	LVS	Ala	Lys	Gly
113	DCI	12 1 2	112.11	260	11.1.				265				- 1 -	270	1	•
	His	Λen	Pro		Ser	Ser	Tle	Ala	Val	LVS	Leu	Phe	Lvs	Phe	Ser	Ara
120	111.5	11511	275	111.9	£37.2. I		11.	280	,	2.72			285			
	(2 h)	lve		Δ1.а	Ala	1	Thr		Gly	Ho	V.a.l	Val		Meet	Pha	I 1 ↔
17.2	O a G	290	Lijo	ALIA	11.14	1.75	295	L C		11.	* - 4 - 1	300	O I I			
	Last		Triri	Lou	Dec	Dha		Ιlω	Ala	Len	Pro		G) v	Ser	T 691	Pho
	3(15	Y. 7 S	111,	11/0/11	110	310	1 11.	1 1 1	.114	2.0.0	315	12.0 0	0.1	L. C. 1	2.7	320
		The	Loui	1	Dec		Acr.	Δ1а	Val	Dho		Val	Va l	adq	Tem	
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126	.21	Paras	Dko	N. casa		77	Lou	Acr	Pro		110	Tyre	Dro	17119		Ser
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	Leu	Ala	Asn		GIn	Pro	GIY	Pue	Lys	Ser	ASII	Met	РГО	510	Ald	MIC
148			5. 1	500					505					510		
	Gly	HIS														
150	an maria	· ~-	515		3											
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156	<213	s> OF	(GAN)	LSM.	Gold	ien r	ıamst	$^{-GL}$								

PATENT APPLICATION: US/10/054,616A

DAIE: 10/31/2002 TIME: 17:06:19

Input Set : A:\033072-022.ST25.txt

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164 Irp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn 162 20 25 163 Ser Asn Ser Ihr Leu Pro Gln Leu Asp Val Thr Arg Ala 164 35 40 45 165 Gly Leu Val Leu Gly Ala Phe 11e Leu Phe Ala Ile Val 166 50 55 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	Gln Thr Ser 30 Ile Ser Val
162 20 25 163 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arq Ala 164 35 40 45 165 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val 16 Val 166 50 55 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	30 The Ser Val
163 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala 164 35 40 45 165 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val 160 50 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	lle Ser Val
164 35 40 45 165 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val 160 Eu 50 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	
165 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val 166 50 55 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	Gly Asn Ile
166 50 55 60 167 Leu Val Ile Leu Ser Val Ala Cys Asr. Arg His Leu Arg	Gly Asn Ile
167 Leu Val Ile Leu Ser Val Ala Cys Ast. Arg His Leu Arg	
168-65 70 /5	
100	80
169 Ash Tyr Phe Ile Val Ash Leu Ala Ile Ala Asp Leu Leu	
170 85 90	95 Tana Tana Na l
171 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly	lyr irp var 110
172	
173 Leu Gly Ard Ile Phe Cys Asp Ile Irp Ala Ala Val Asp	vai Leu Cys
1.4	Acr Ala Tur
175 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile . 176 130 140	ASP AId . /I
176 130 135 140 177 The Gly Val Arg Tyr Ser Let Gln Tyr Pro Thr Leu Val	The Ara Ara
	160
- 178 145 - 156 - 156 - 179 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser -	
186 165 170	175
181 Ser Ile Gly Pro Led Leu Gly Trp Lys Glu Pro Ala Pro	-
	190
185 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu	
184 195 200 205	
185 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val	Met Tyr Cys
186 210 215 220	
To: Arg var Tyr Tie var Ara Lys Arg Int Int Lys Ash Leu	Giu Ala Giy
188 225 230 235	240
189 Val Met Lys Glu Met Ser Asr. Ser Lys Glu Leu Thr Leu	Arq Ile His
190 245 250	255
191 Ser Lys Asa Pho His Glu Asp Thr Leu Ser Ser Thr Lys	Ala Lys Gly
200	270
193 His Ash Pro Ard Ser Ser Ile Ala Val Lys Leu Phe Lys	Pho Ser Ara
194 275 280 285	
19% Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly	Met Phe Ile
196 290 295	
The first two many fact than the file also for the flow of the	
197 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly	320
198 305 310	
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val	
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 206 325 330	335
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 200 325 201 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro	335 Cys Ser Ser
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 200 325 330 201 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro 201 340 345	335 Cys Ser Ser 350
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 206 325 336 201 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro 201 340 345 201 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys	335 Cys Ser Ser 350
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 206 325 336 201 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro 345 345 201 Lys Glu Phe Lys Arq Ala Phe Met Arg Ile Leu Gly Cys 365 365	335 Cys Ser Ser 350 Gln Cys Ard
198 305 310 315 199 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val 206 325 336 201 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro 201 340 345 201 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys	335 Cys Ser Ser 350 Gln Cys Ard

PATENT APPLICATION: US/10/054,616A

DATE: 10/31/2002 TIME: 17 06:19

Input Set A:\033072-022.ST25.txt
Output Set N:\CRF4\10312002\J054616A.raw

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211	Arg	Thr	Leu	Pro		Ala	Ser	Pro	ser	Pro	GlŢ	Tyr	Leu	$G1\gamma$	Arq	GIY
212				42σ					425					430		
	Ala	Gln		Pro	Leu	Glu	Leu		Ala	Tyr	Pro	Glu		Lys	ser	$G_{-\gamma}$
214	- 1		4.35				<i>a</i> .1	440	-	a .1			445			
$\frac{215}{216}$	Ala	Leu	Leu	Ser	Leu	Pro	455	Pro	Pro	GIŢ	Arg	Arg 460	GIY	Arg	Leu	Asp
	Sar	450 Gly	Dro	F 2513	Dira	Thr		Luc	Len	Len	G1·z		Pro	Glu	Sar	Pro
	465	GIY	r I C	L (:: .c	r .1C	470	1 110	L; 5	1. (4	LCa	475	Olu	110	O i u	270 1	480
		Thr	Glu	G1;	Asp		Ser	Asn	Gly	Gly		Asp	Ala	Thr	Thr	
220	-				4 ± 5				-	490	-				495	
	Leu	Ala	Asn	$\operatorname{GL}_7^{\prime}$	$\operatorname{Gl} n$	Pro	$G1_T^{\perp}$	Phe		Ser	Asn	Met	Pro		Ala	Fro
222				500					505					510		
	Gly	His														
1124	. 517)> SE	515	> N O	. 1											
)														
		2> TY			1 _,											
		3 > ()}			Gold	den 1	namst	ter								
232	< 400) > SI	<u> EQUE</u> 1	4CE:	4											
233	$M\!\ominus\!t.$	Asn	Pro	Asp	Leu	Asp	Thr	Gly	His	Asn	Thr	Ser	Ala	Pro	Ala	GIn
₂ 34	1				r.					10					1.5	
	Trp	G17	Glu		Lys	Asp	Ala	Asn		Thr	Gly	Pro	Asn		Thr	ser
2.36	Clare and	Asn	Can	20 The	·	Dine	(21.5)	T. co	25	tto 1	than	A	210	30	Can	1' 1
238	Set	ASII	ser 35	1111	t.'U	PIO	GIII	4 ()	ASP	Val	1111	AIG	45	116	261	Val
	G. 5	LOU		1 + 2 1	GIV	Ala	Phe		Leu	Pho	Ата	110		Glv	Asn	He
4 0		50					5.5					60				
₂ 4 1	Leu	Val	11e	Leu	ser	Val	Ala	Cys	Asn	Arq	His	Leu	Arg	Thr	Pro	Thr
. 4.	6 E					±.0					7.5					6.0
243	Asn	Tyr	Phe	Ile		Asn	Leu	Ala	He		Asp	Leu	Lea	Leu		Phe
z 4 4	7:1	1			85			or 1		90	11 - 1			Y	95	17 l
$\frac{245}{146}$	lmr	Val	reu	$\frac{Pro}{100}$	Fue	ser	Ala	1111	105	GIU	vai	Leu	GIŢ	110	Trb	Val
	Len	Gly	Ara		Phe	(****	Asn	He		Ala	Ala	Va l	Asp		Len	(77.4
248	111 (4	OTY	115	1 1 (1 110	C. 1 C.	11274	120		1110			125	• • • •		. , .,
	Cys	Thr		ser	ile	Leu	ser	Leu	Cys	Ala	He	Ser	He	Asp	His	Гуг
250							135					140				
		Gly	Val	Arg	Tyr	Ser	Leu	Gln	Tyr	Pro		$L\!\!\in\!\!u$	Val	Thr	Ard	Arq
252						150					155					160
	L;;s	Ala	Ιle	Leu		Leu	Leu	Ser	Val		Val	Leu	Ser	Ihr		He
254 555	0	Пе	C1	Dro	165	Lau	C1.	Time	Luc	170	Dro	Als	Dro	Nan	175 Asp	Aan
256	261.	116	OTA	180	red	r.eu	GIY	ıτħ	185	0111	PTO	AId	PIO	190	нър	ASP
	Lvs	Glu	Cys		Va l	Thr	Glu	Glu		Phe	Tvr	Ala	Leu		Ser	Ser
258	• =		195	- 4	=			200			-		205			

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/054,616A

DATE: 10/31/2002 FIME: 17:06:20

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